DUKE ENERGY CORPORATION

NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION

SALUDA RIVER ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-413

CATAWBA NUCLEAR STATION, UNIT 1

RENEWED FACILITY OPERATING LICENSE

Renewed License No. NPF-35

- 1. The U.S. Nuclear Regulatory Commission (Commission) having previously made the findings set forth in License No. NPF-35 issued on January 17, 1985, has now found that:
 - A. The application for renewed operating license filed by the Duke Energy Corporation acting for itself, North Carolina Electric Membership Corporation, and Saluda River Electric Cooperative, Inc., (the licensees) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1), and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by this renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for Catawba Nuclear Station, Unit 1 (facility or plant), and that any changes made to the plant's current licensing basis in order to comply with 10 CFR 54.29(a) are in accord with the Act and the Commission's regulations:
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
 - D. There is reasonable assurance: (i) that the activities authorized by this renewed operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

- E. Duke Energy Corporation* is technically qualified to engage in the activities authorized by this renewed operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter 1 (except as exempted from compliance in Section 2.D. below);
- F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;
- G. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;
- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Renewed Facility Operating License No. NPF-35 is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied, and;
- I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this renewed operating license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
- 2. Based on the foregoing findings and the Partial Initial Decisions issued by the Atomic Safety and Licensing Boards dated June 22, September 18, and November 27, 1984, regarding this facility and satisfaction of conditions therein imposed, except as hereinafter set forth, and the Commission's vote on January 17, 1985, Facility Operating License No. NPF-31 issued on December 6, 1984, superseded by Facility Operating License No. NPF-35 issued on January 17, 1985, is superseded by Renewed Facility Operating License No. NPF-35, hereby issued to the Duke Energy Corporation, the North Carolina Electric Membership Corporation, and the Saluda River Electric Cooperative, Inc., to read as follows:
 - A. This renewed operating license applies to the Catawba Nuclear Station, Unit 1, a pressurized water reactor and associated equipment (the facility) owned by the Duke Energy Corporation, the North Carolina Electric Membership Corporation, and the Saluda River Electric Cooperative, Inc. The facility is located on the licensees' site in York County, South Carolina, on the shore of Lake Wylie approximately 6 miles north of Rock Hill, South Carolina, and is described in Duke Energy Corporation's Updated Final Safety Analysis Report, as supplemented and amended, and in its Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

^{*}Duke Energy Corporation is authorized to act as agent for the North Carolina Electric Membership Corporation and the Saluda River Electric Cooperative, Inc., and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

- (1) Duke Energy Corporation, pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in York County, South Carolina, in accordance with the procedures and limitations set forth in this renewed operating license;
- (2) North Carolina Electric Membership Corporation and Saluda River Electric Cooperative, Inc., to possess the facility at the designated location in York County, South Carolina, in accordance with the procedures and limitations set forth in this renewed operating license;
- (3) Duke Energy Corporation, pursuant to the Act and 10 CFR Part 70 to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended;
- (4) Duke Energy Corporation, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) Duke Energy Corporation, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
- (6) Duke Energy Corporation, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility authorized herein, and;
- (7) Duke Energy Corporation, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of McGuire Nuclear Station, Units 1 and 2, and Oconee Nuclear Station, Units 1, 2 and 3.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Duke Energy Corporation is authorized to operate the facility at reactor core full steady state power level of 3411 megawatts thermal (100%) in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 209, which are attached hereto, are hereby incorporated into this renewed operating license. Duke Energy Corporation shall operate the facility in accordance with the Technical Specifications.

(3) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on December 16, 2002, describes certain future activities to be completed before the period of extended operation. Duke shall complete these activities no later than December 6, 2024, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on December 16, 2002, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following issuance of this renewed operating license. Until that update is complete, Duke may make changes to the programs described in such supplement without prior Commission approval, provided that Duke evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

(4) Antitrust Conditions

Duke Energy Corporation shall comply with the antitrust conditions delineated in Appendix C to this renewed operating license.

(5) <u>Fire Protection Program</u> (Section 9.5.1, SER, SSER #2, SSER #3, SSER #4, SSER #5)*

Duke Energy Corporation shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report, as amended, for the facility and as approved in the SER through Supplement 5, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(6) Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. 180, are hereby incorporated into this renewed operating license. Duke Energy Corporation shall operate the facility in accordance with the Additional Conditions.

D. The facility requires exemptions from certain requirements of Appendix J to 10 CFR Part 50, as delineated below and pursuant to evaluations contained in the referenced SER and SSERs. These include, (a) partial exemption from the requirement of paragraph III.D.2(b)(ii) of Appendix J, the testing of containment airlocks at times when the containment integrity is not required (Section 6.2.6 of the SER, and SSERs # 3 and #4), (b) exemption from the requirement of paragraph III.A.(d) of Appendix J, insofar as it requires the venting and draining of lines for type A tests (Section 6.2.6 of SSER #3), and (c) partial exemption from the requirements of paragraph III.B of Appendix J, as it relates to bellows testing (Section 6.2.6 of the SER and SSER #3). These exemptions are authorized by law, will not present an undue risk to the public health and safety, are consistent with the common defense and security, and are consistent with certain special circumstances as discussed in the referenced SER and SSERs. These exemptions are, therefore, hereby granted pursuant to 10 CFR 50.12. With the granting of these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

^{*}The parenthetical notation following the title of this renewed operating license condition denotes the section of the Safety Evaluation Report and/or its supplement wherein this renewed license condition is discussed.

E. Physical Protection

Duke Energy Corporation shall fully implement and maintain in effect all provisions of the Commission-approved nuclear security and contingency, and guard training and qualification plans including amendments made pursuant to provisions of the Miscellaneous Amendment and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains safeguards information protected under 10 CFR 73.21, is entitled: "Nuclear Security and Contingency Plan," as revised through April 18, 1996. The plan which does not contain safeguards information is entitled "Nuclear Security Training and Qualification Plan," as revised through April 19, 1996. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

F. Reporting to the Commission

Except for Item 2.C.(2), Duke Energy Corporation shall report any violations of the requirements contained in Section 2.C. of this renewed operating license in the following manner: initial notification shall be made within twenty-four (24) hours to the NRC Operations Center via the Emergency Notification System with written follow-up within 30 days in accordance with the procedures described in 10 CFR 50.73 (b), (c) and (e).

- G. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- 3. This renewed operating license is effective as of the date of issuance and shall expire at midnight on , 2043.

FOR THE NUCLEAR REGULATORY COMMISSION

J. E. Dyer, Director Office of Nuclear Reactor Regulation

Attachments:

- 1. Appendix A Technical Specifications
- 2. Appendix B Additional Conditions
- 3. Appendix C Antitrust Conditions

Date of Issuance: